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ABSTRACT OF THE DISCLOSURE

In order to improve the safety with which commodities (including regulated hazardous materials) can be shipped by rail around the country in tank cars and the like, each tank and associated undercarriage and structure is inspected and requalified according to an exhaustive predetermined list of sites, tests, parameters and apparatus comprising, broadly, determining which type of vehicle is under inspection and selecting an exhaustive list of sites to be inspected for the identified type of vehicle from an instruction set. Each of the listed sites is inspected in accord with the instructions set forth for each of the listed sites in the instruction set and the data derived from implementation of the tests conducted at each of the exhaustive list of sites is recorded.